



Destination 2025 Monthly: January 2018

Prepared by the Department of Research & Performance Management

Author: Anne Walton Garrison

Key Findings

- According to their performance on the ACT, SCS juniors and seniors are more prepared for college in English and reading than they are in science and math.
- Asian students have by far the highest rate of AP participation, followed by White students, and then by Multiracial, Latino, and Black students, respectively.
- AP exams taken by Asian and White students average above a 3 (the passing score), while the average exam scores for Latino and Black students fall below that threshold.
- Economically disadvantaged students have made strides in both AP participation and AP exam performance over the last three years.

Overview

The two key performance indicators (KPIs) addressed in this report are aligned to Priority 2 of Destination 2025: improving postsecondary readiness. They also align to new ESSA (Every Student Succeeds Act) accountability measures of college- and career-readiness. This month's KPIs are:

- Priority 2, KPI 10: percentage of students meeting ACT college-readiness benchmarks
- Priority 2, KPI 7: Advanced Placement participation rates and scores by subgroup

Note that the analyses presented in this report reflect both charter and non-charter schools.

College-Readiness

ACT, Inc. conducts research examining the relationship between high-school students' performance on the ACT subject tests and their subsequent performance in various college courses. Using this information, ACT, Inc. formulates college-readiness benchmarks for each ACT subject-area test. Every year, Shelby County Schools (SCS) administers the ACT to all 11th-graders; Figure 1 shows their performance on each subject-area test for the last three years. (Note that each subject's college-readiness threshold is indicated in parentheses.)

As the figure shows, the percentage of 11th-graders meeting ACT college-readiness benchmarks has been relatively flat over the past three years, with zero to two percentage-point gains in almost every area. Reading is the notable exception: the percentage of juniors meeting the reading benchmark climbed six points from 2014–15 to 2016–17.

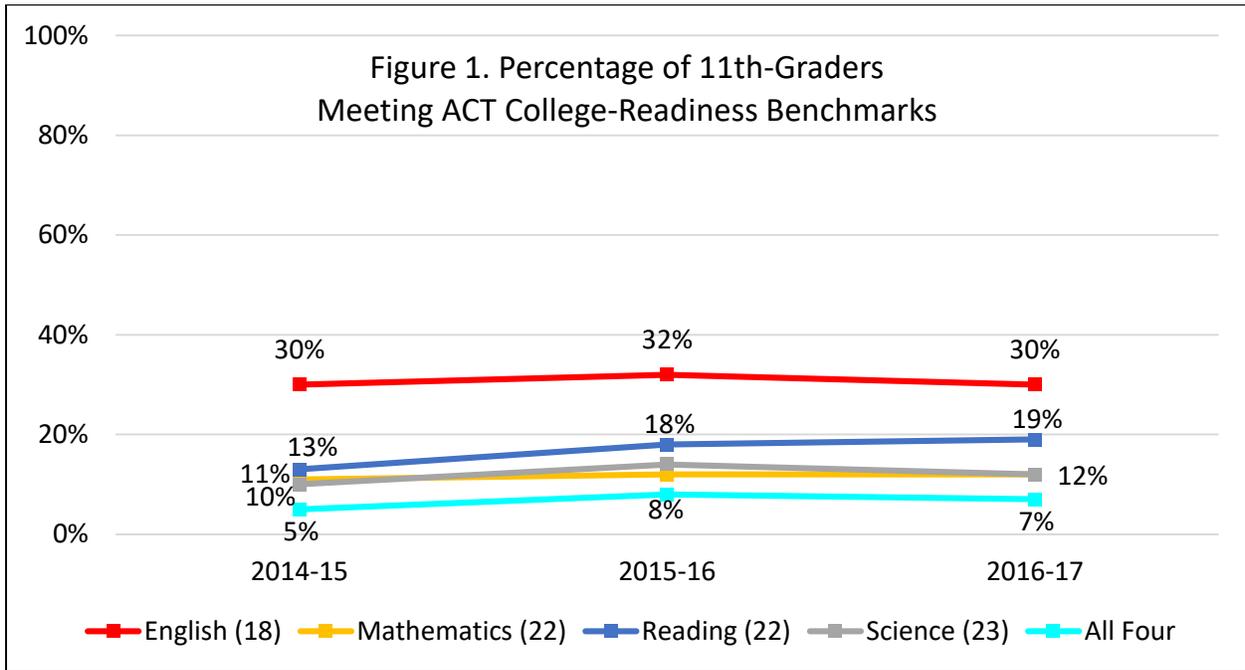
The Tennessee Department of Education (TDOE) has recently begun calculating and tracking the ACT performance of on-time graduates for accountability purposes. Figure 2 presents the ACT performance of the on-time graduates in the class of 2017. (Again, each subject's college-readiness threshold is indicated in parentheses.) Within each subject area, the class of 2017 showed the same pattern of college-readiness as the juniors, but at higher rates (as to be expected). The highest rate was in English, then reading, followed by very low readiness levels in science and math.

TDOE designates students who score an ACT composite of 21 or higher as *on track*. By this definition, 23% of the class of 2017 were on track. For the three Critical Focus high schools, however, the percentages were much lower:

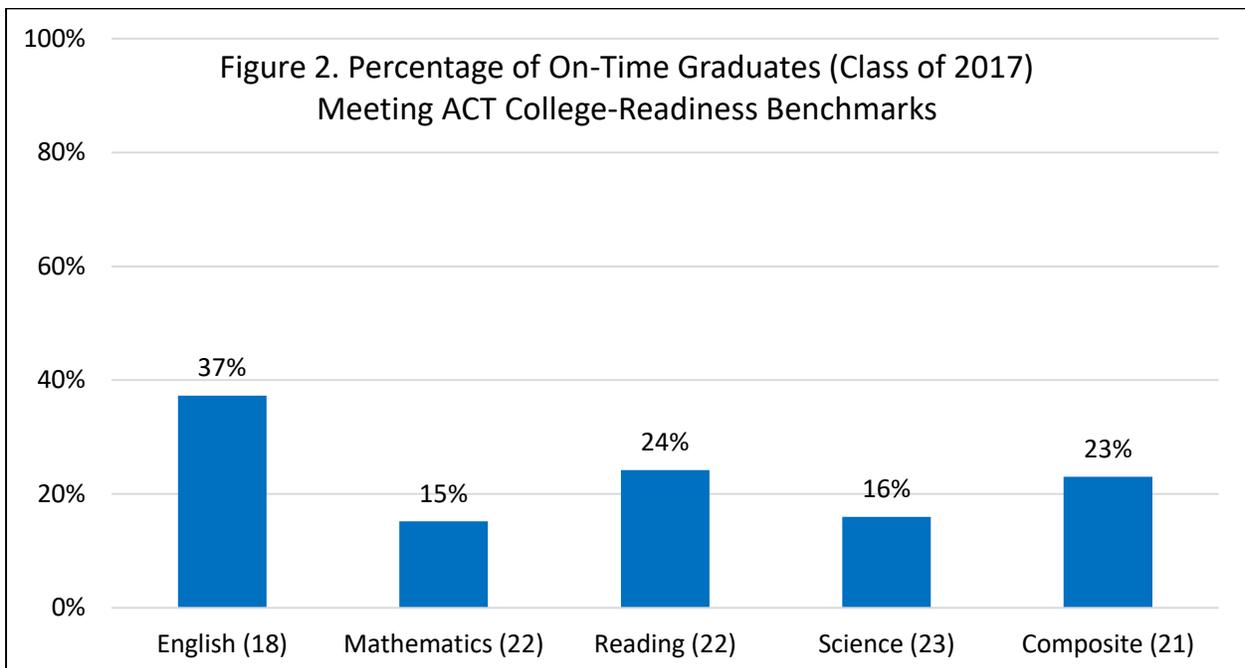


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<u>Critical Focus School</u>	<u>% On Track</u>
Trezevant High	2.8
Westwood High	3.5
Wooddale High	5.2



Source: 2016-17 District Profile Report from ACT, Inc.



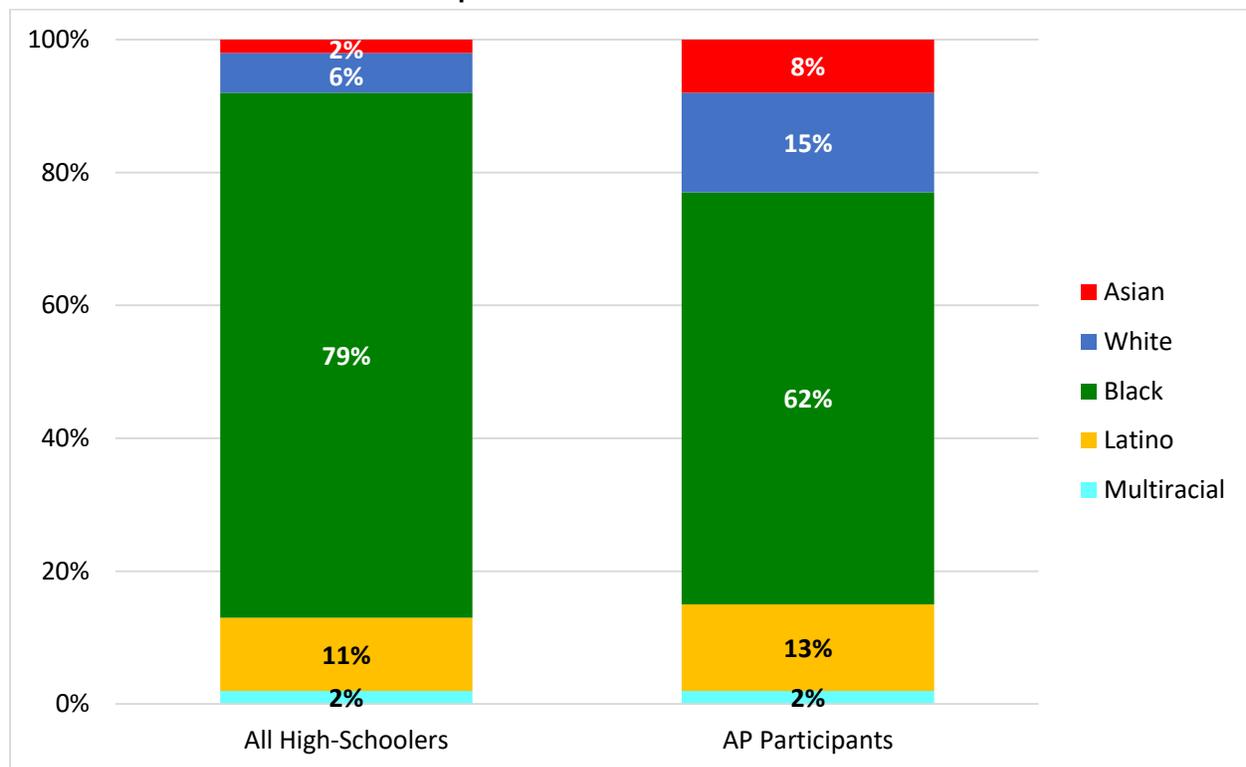


Advanced Placement Participation by Subgroup

One method of enhancing college-readiness is through rigorous college-preparatory coursework, such as Advanced Placement (AP). Students can begin taking AP courses as early as ninth grade, but the bulk of AP courses are taken in 11th and 12th grade. Increasing AP participation among disadvantaged groups can help close achievement gaps, as well as gaps in different groups' college-readiness, college enrollment, and college success. This brief focuses on AP participation and performance of racial/ethnic and economic subgroups, but information about AP participation for students with disabilities and English learners is included in the appendix.

Figure 3 displays the 2017–18 racial/ethnic breakdown of AP participants compared to all students in grades 9–12. White and Asian students are overrepresented in AP courses, while Black students are underrepresented. Multiracial and Latino students, on the other hand, are at or near parity. (Students with other racial/ethnic designations were excluded, because they constitute less than one percent of both AP participants and high-schoolers in general.)

Figure 3. 2017–18 Racial/Ethnic Composition of AP Participants Compared to All 9th–12th Graders

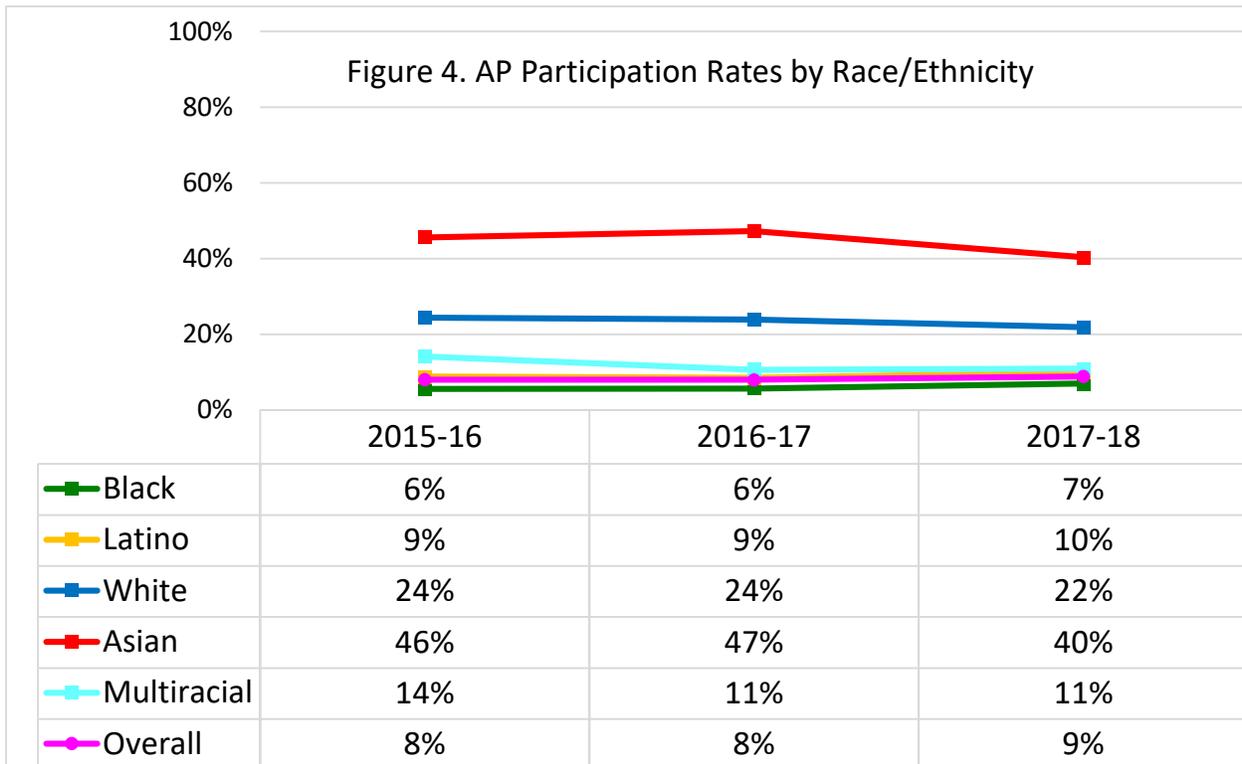


While Figure 3 gives a good overview of the racial/ethnic composition of AP participants, it is important to look also at AP participation rates *within* each racial/ethnic group to get a real sense of the equitability of AP participation. Thus, Figure 4 presents this information for the last three years. (Participation rates reflect the percentage of 9th–12th graders enrolled in at least one AP course.)



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As Figure 4 reveals, Asian students have by far the highest rate of AP participation, followed by White students, and trailed by Multiracial, Latino, and Black students, respectively. However, AP participation rates among Black and Latino students rose slightly in 2017–18, as did the overall participation rate.



A student's ability to participate in AP is contingent, of course, upon the student's school offering AP courses in which to participate. To explore whether the pattern of AP participation among different racial/ethnic groups changes according to the number of AP courses offered, Figure 5 presents the 2017–18 AP participation rates by race/ethnicity in schools offering five or more AP courses, as compared to those offering fewer than five AP courses. (Again, the rates reflect the percentage of 9th–12th graders enrolled in at least one AP course.)

Unsurprisingly, all the rates are higher in the subset of schools offering five or more AP courses. In those schools, the disparate pattern of AP participation is the same as that presented in Figure 4 (which shows the district overall). In schools offering fewer than five AP courses, the participation rates are much more equitable across racial/ethnic groups, but they are also extremely low.

As demonstrated in the May 2017 KPI report, school size greatly impacts a school's ability to offer advanced courses. Smaller schools have much more difficulty offering multiple sections of courses (a regular section and an AP section, for instance), because there are not enough students or teachers. To this point, the median size of schools offering five or more AP courses is 1,151, as compared to a median size of 291 for schools offering fewer than five AP courses.



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Here is a look at current (2017–18) AP participation at the three Critical Focus high schools:

<u>Critical Focus School</u>	<u># AP Courses</u>	<u>AP Participation Rate</u>	<u>School Size</u>
Trezevant High	0	0.0%	530
Westwood High	1	3.3%	366
Wooddale High	2	3.7%	752

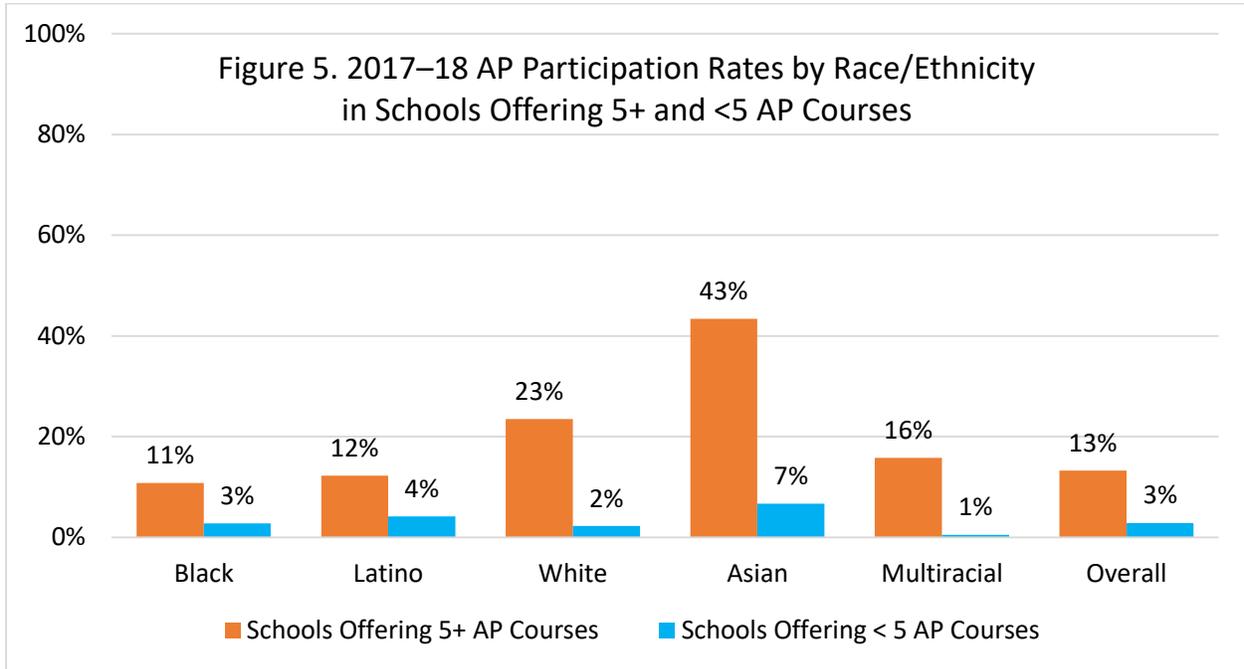
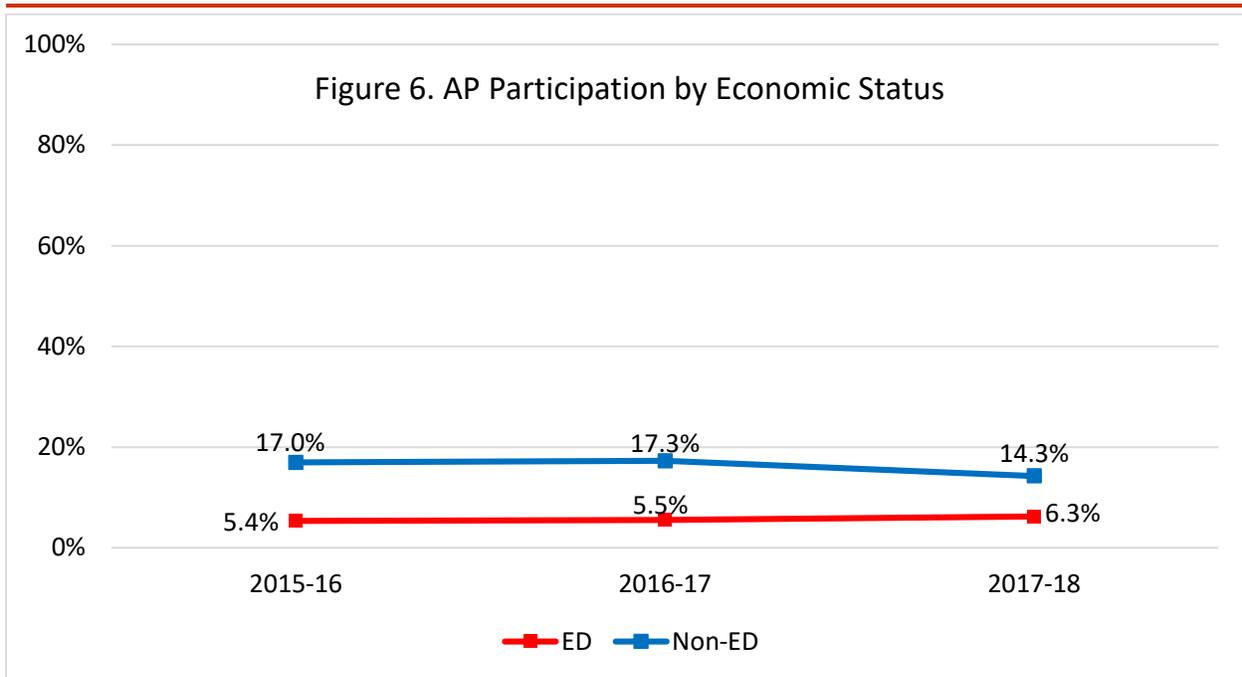


Figure 6 presents AP participation by economic status over the last three years. Economically disadvantaged (ED) students have lower AP participation than non-ED students, but the gap has narrowed by 3.6 percentage points over the last three years (from 11.6 in 2015–16 to 8.0 this year). This narrowing is the result of both a dip in non-ED participation as well as an increase in ED participation.



Subgroup Performance on Advanced Placement Exams

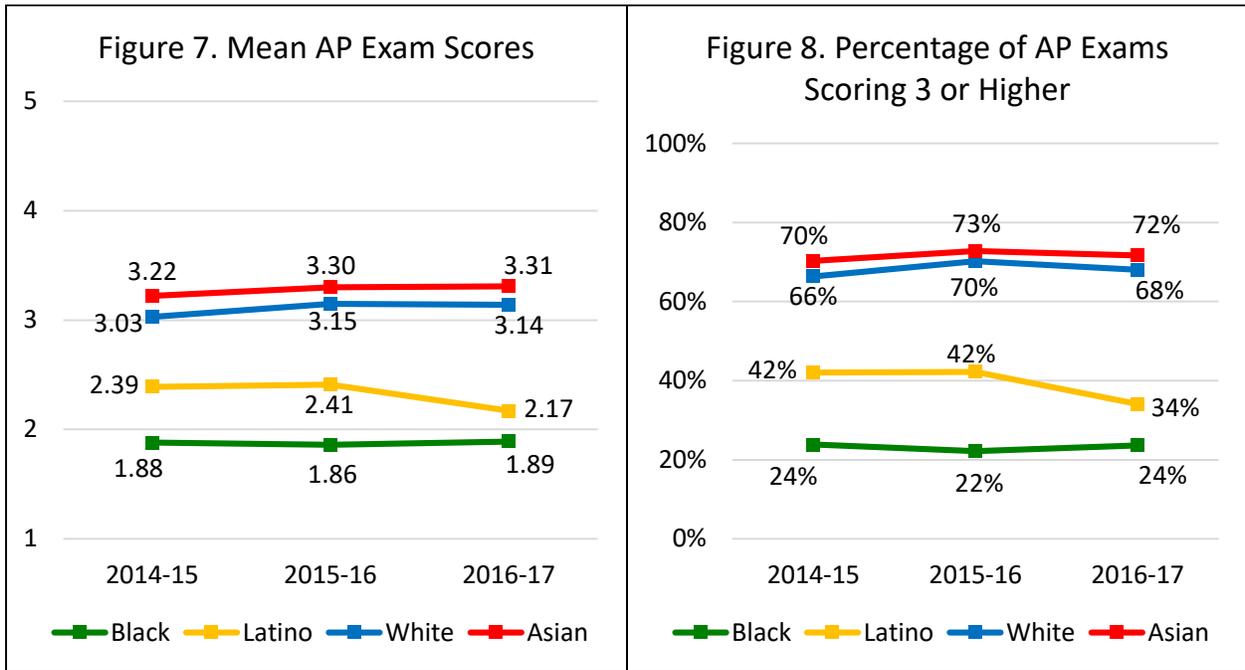
While participation in AP courses is a very valuable way to prepare for college, performance on AP exams determines whether students can get college credit for their AP participation. A score of 3 or higher (on a scale of 1 to 5) on an AP exam is considered passing, since that is the minimum score required to obtain college credit at most postsecondary institutions. Figure 7 displays mean AP exam scores by race/ethnicity for the past three years. AP exams taken by Asian and White students average above a 3, while the average exam scores for Latino and Black students fall below that threshold.

Figure 8 presents the percentage of AP exams passed (i.e., scoring 3 or higher) by race/ethnicity for the past three years. The pattern is the same as that presented in Figure 7. One interesting thing to note, however, is that the AP exam pass rates for Black students in non-charter schools are higher than those shown in Figure 8. For instance, in 2016–17 the pass rate was 28% (as compared to just 13% for charter schools). As a point of reference, Black students in Tennessee public schools have an AP exam pass rate of 30%, while Black students in public schools nationwide have an AP exam pass rate of 28%. Thus, SCS Black students in non-charter schools are performing on par with their counterparts throughout the nation.

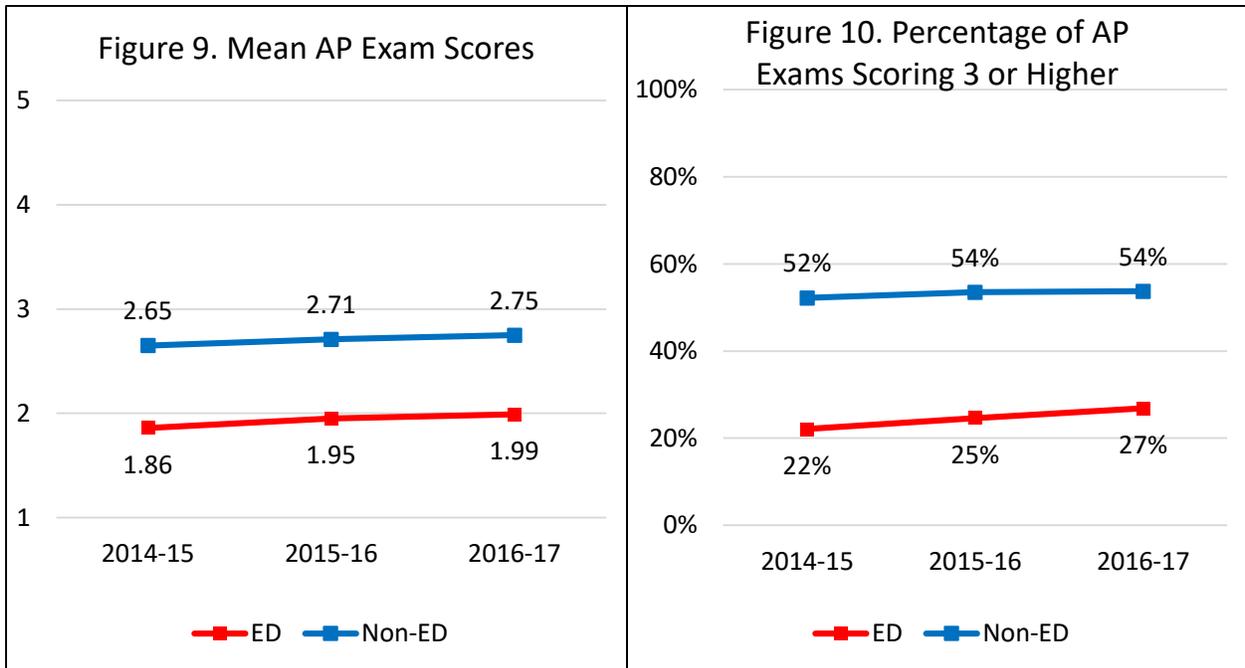
As for economic status, AP exam scores have risen among economically disadvantaged students over the last three years. Figures 9 and 10 present ED and non-ED students' mean AP exam scores and AP exam pass rates, respectively, from 2014–15 to 2016–17. During this period, ED students' average AP exam score increased from 1.86 to 1.99, and their AP exam pass rate climbed from 22% to 27%, narrowing the ED/non-ED gap by three percentage points.



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Source: AP District Summary Reports from College Board



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The 2016–17 AP exam performance for the three Critical Focus high schools was as follows:

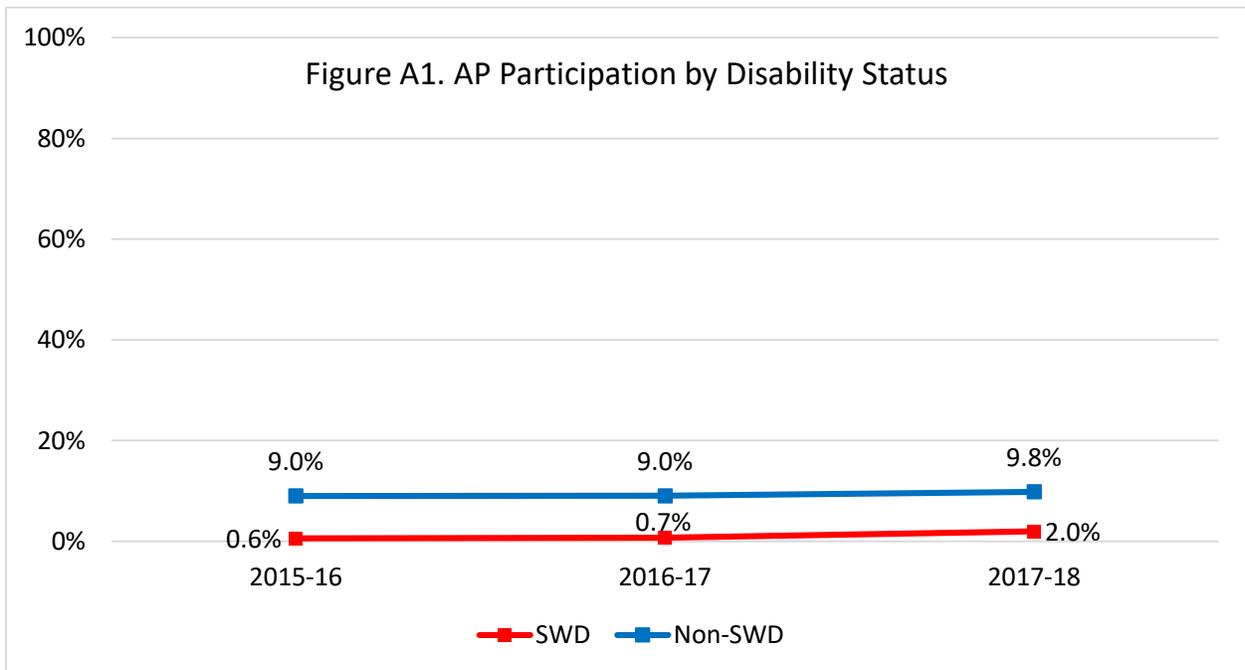
<u>Critical Focus School</u>	<u>Mean AP Exam Score</u>	<u>AP Exam Pass Rate</u>
Trezevant High	N/A	N/A
Westwood High	1.12	0.0%
Wooddale High	1.63	15.6%

Recommendations

- Encourage more students to participate in ACT preparation resources.
- Provide support for more flexible staffing and resources such as student-based budgeting and online/part-time/shared AP teachers in order for smaller high schools to increase AP access.
 - Similarly, identify opportunities for middle schools to offer more prerequisites to prepare students for AP coursework.
- Invest in additional AP teacher certification training and continue to provide intensive support and observation feedback for AP teachers, especially where there is turnover.
- Continue to increase the number of students attending AP Student Saturday reviews and AP Camp to strengthen exam outcomes and college credits earned.

Appendix

2017–18 has seen a slight rise in the percentage of students with disabilities (SWD) taking Advanced Placement (AP) courses, to 2% from less than 1% in recent years (see Figure A1).





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The share of English learners (EL) taking Advanced Placement (AP) courses has increased slightly: from 1.3% in 2015-16 to 2.1% this year (see Figure A2).

